

CLAIMS

- 5 1. A method of translating a message represented in a first markup language comprising a succession of blocks respectively associated with an address attribute of said blocks, said address attribute being chosen from a set of attributes comprising references to a recipient station of the message in a communication network, references to an intermediate station of said
- 10 communication network and references to a next station in the transmission of said message over the communication network, said method being adapted to translate the message into a second markup language comprising two groups of blocks, a first group being adapted to comprise blocks addressed to one or more intermediate stations of said communication network and a second group
- 15 being adapted to comprise blocks addressed to said recipient station of the communication network, characterized in that it comprises the following steps:
- selecting a first set of blocks of the message associated with an address attribute comprising a reference to said recipient station of the communication network;
- 20 - adding said first set of blocks to said second group of blocks;
- obtaining the number of blocks written in the second group of blocks; and
 - if said number of blocks is equal to zero, adding to the second group of blocks a single block chosen from a second set of blocks.
- 25 2. A translation method according to claim 1, further comprising a step of selecting said second set of blocks from the blocks of the message associated with an address attribute comprising a reference to a next station of said communication network.
- 30 3. A translation method according to claim 1, further comprising the following steps:
- classification of the blocks of said second set as a function of the size of said blocks;

- adding the largest block to the second group of blocks if said number of blocks is equal to zero; and

- adding other blocks of said second set to the first group of blocks.

5 4. A translation method according to claim 1, further comprising the following steps:

- selecting a third set of blocks of the message associated with an address attribute comprising a reference to an intermediate station of the communication network; and

10 - adding said third set of blocks to said first group of blocks.

5. A translation method according to claim 1, further comprising the following steps:

- selecting a fourth set of blocks associated respectively with an address attribute comprising a reference to any of the stations of the communication network; and

15 - adding said fourth set of blocks to the first group of blocks.

6. A method of reverse translation of a message represented in a second markup language comprising two groups of blocks, a first group being adapted to comprise at least blocks addressed to one or more intermediate stations of the communication network and possibly blocks addressed to a recipient station, and a second group being adapted to comprise blocks addressed to said recipient station of the communication network, the reverse translation method being adapted to translate the message into a first markup language comprising a succession of blocks associated respectively with an address attribute of said blocks, said address attribute being chosen from a set of attributes comprising references to a recipient station of the message in a communication network, references to an intermediate station of said communication network and references to a next station in the transmission of said message over the communication network, characterized in that it

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30 comprises the following steps:

- extracting the blocks of said first group;
- extraction of the blocks of said second group; and

- writing of the blocks of said first group, then of the blocks of said second group.

7. A method of generating a message represented in a second markup language comprising two groups of blocks, a first group being adapted to comprise blocks addressed to one or more intermediate stations of said communication network and a second group being adapted to comprise blocks addressed to the recipient station of the communication network, characterized in that it comprises the following steps:

- generating a message represented in a first markup language comprising a succession of blocks associated respectively with an address attribute of said blocks, said address attribute being chosen from a set of attributes comprising references to a recipient station of the message in a communication network, references to an intermediate station of said communication network and references to a next station in the transmission of said message over the communication network; and

- translation of said message according to the method of translation in accordance with claim 1.

8. A device for translating a message represented in a first markup language comprising a succession of blocks respectively associated with an address attribute of said blocks, said address attribute being chosen from a set of attributes comprising references to a recipient station of the message in a communication network, references to an intermediate station of said communication network and references to a next station in the transmission of said message over the communication network, said device being adapted to translate the message into a second markup language comprising two groups of blocks, a first group being adapted to comprise blocks addressed to one or more intermediate stations of said communication network and a second group being adapted to comprise blocks addressed to said recipient station of the communication network, characterized in that it comprises:

- means for selecting a first set of blocks of the message associated with an address attribute comprising a reference to said recipient station of the communication network;

- means for adding said first set of blocks to said second group of blocks;

- means for obtaining the number of blocks written in said second group of blocks; and

5 - means for adding a single block, chosen from a second set of blocks, to said second group of blocks, if said number of blocks is equal to zero.

9. A translation device according to claim 8, further comprising means for selecting said second set of blocks from the blocks of the message associated with an address attribute comprising a reference to a next station of
10 said communication network.

10. A translation device according to claim 8, further comprising means for classifying the blocks of said second set as a function of the size of said blocks, said adding means being adapted to add the block of greatest size to said second group of blocks if the number of blocks is equal to zero and of
15 adding the other blocks of said second set to the first group of blocks.

11. A translation device according to claim 8, wherein it comprises means incorporated in:

- a microprocessor;
- a read-only memory adapted to store the program for translating
20 a message; and

- a random-access memory adapted to store the variables modified during the execution of said program.

12. A device for reverse translation of a message represented in a second markup language comprising two groups of blocks, a first group being
25 adapted to comprise at least blocks addressed to one or more intermediate stations of the communication network and possibly blocks addressed to a recipient station, and a second group being adapted to comprise blocks addressed to said recipient station of the communication network, the reverse translation device being adapted to translate the message into a first markup
30 language comprising a succession of blocks associated respectively with an address attribute of said blocks, said address attribute being chosen from a set of attributes comprising references to a recipient station of the message in a

communication network, references to an intermediate station of said communication network and references to a next station in the transmission of said message over the communication network, characterized in that it comprises:

- 5 - means for extracting the blocks of said first group;
- means for extracting the blocks of said second group; and
- writing means adapted to write the blocks of said first group, then the blocks of said second group.

10 13. A reverse translation device according to claim 12, wherein it is incorporated in:

- a microprocessor;
- a read-only memory adapted to store a program for reverse translation of a message; and
- 15 - a random-access memory adapted to store in registers the variables modified during the execution of said program.

 14. A computer, comprising means adapted to implement the method of translating a message according to claim 1.

 15. A computer, comprising means adapted to implement the method of reverse translation of a message according to claim 6.

20 16. A computer, comprising means adapted to implement the method of generating a message according to claim 7.

 17. A communication network, comprising means adapted to implement the method of translating a message according to claim 1.

25 18. A communication network, comprising means adapted to implement the method of reverse translation of a message according to claim 6.

 19. A communication network, comprising means adapted to implement the method of generating a message according to claim 7.

30 20. A computer program comprising portions of software code adapted to implement the method of translating a message according to claim 1, when said program is loaded onto a computer.

 21. A computer program comprising portions of software code adapted to implement the method of reverse translation according to claim 6.

22. A computer program comprising portions of software code adapted to implement the method of translating a message according to claim 7 when said program is loaded onto a computer.

5 23. Means of storing information which are fixed or partially or totally removable, and adapted to store sequences of instructions of the method of translating a message according to claim 1.

24. Means of storing information which are fixed or partially or totally removable, adapted to store sequences of instructions of the method of reverse translation according to claim 6.

10 25. Means of storing information which are fixed or partially or totally removable, adapted to store sequences of instructions of the method of generating a message according to claim 7.